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# Synthesis, structure, and hydrophosphorylation of π-complexes of hexacarbonyltungsten(0) with cyclohexanone, cyclohexanethione, and N-cyclohexylideneaniline

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## Abstract

New carbonyl π-complexes of tungsten(0) with cyclohexanone, cyclohexanethione, and N-cyclohexylideneaniline were synthesized. Geometric and electronic parameters of the ligands, as well as energy parameters of the complex formation process, were determined by quantum-chemical calculations. Hydrophosphorylation with diethyl phosphonate changed the reactivity of coordinated N-cyclohexylideneaniline, while no analogous effect was observed for cyclohexanone and cyclohexanethione. 